UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF COMMERCIAL FISHERIES

CALIFORNIA FISHERY MARKET NEWS MONTHLY SUMMARY

JANUARY 1967

PART II–Fishing Information*

Sea-surface temperatures, fishing and research information of interest to the West Coast tuna-fishing industry and marine scientists

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SEA SURFACE TEMPERATURE CHARTS, EASTERN PACIFIC OCEAN

JANUARY 1967

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Charts

Figure 1.--Mean sea surface temperatures (°F) derived from approximately 9000 observations. Squares show temperatures at weather ship stations. Numerals on shore are temperatures at coastal and lightship stations.

Figure 2.--Deviation of sea surface temperatures (°F) from long term charts of H.O. 225. Hatched areas are colder in 1967.

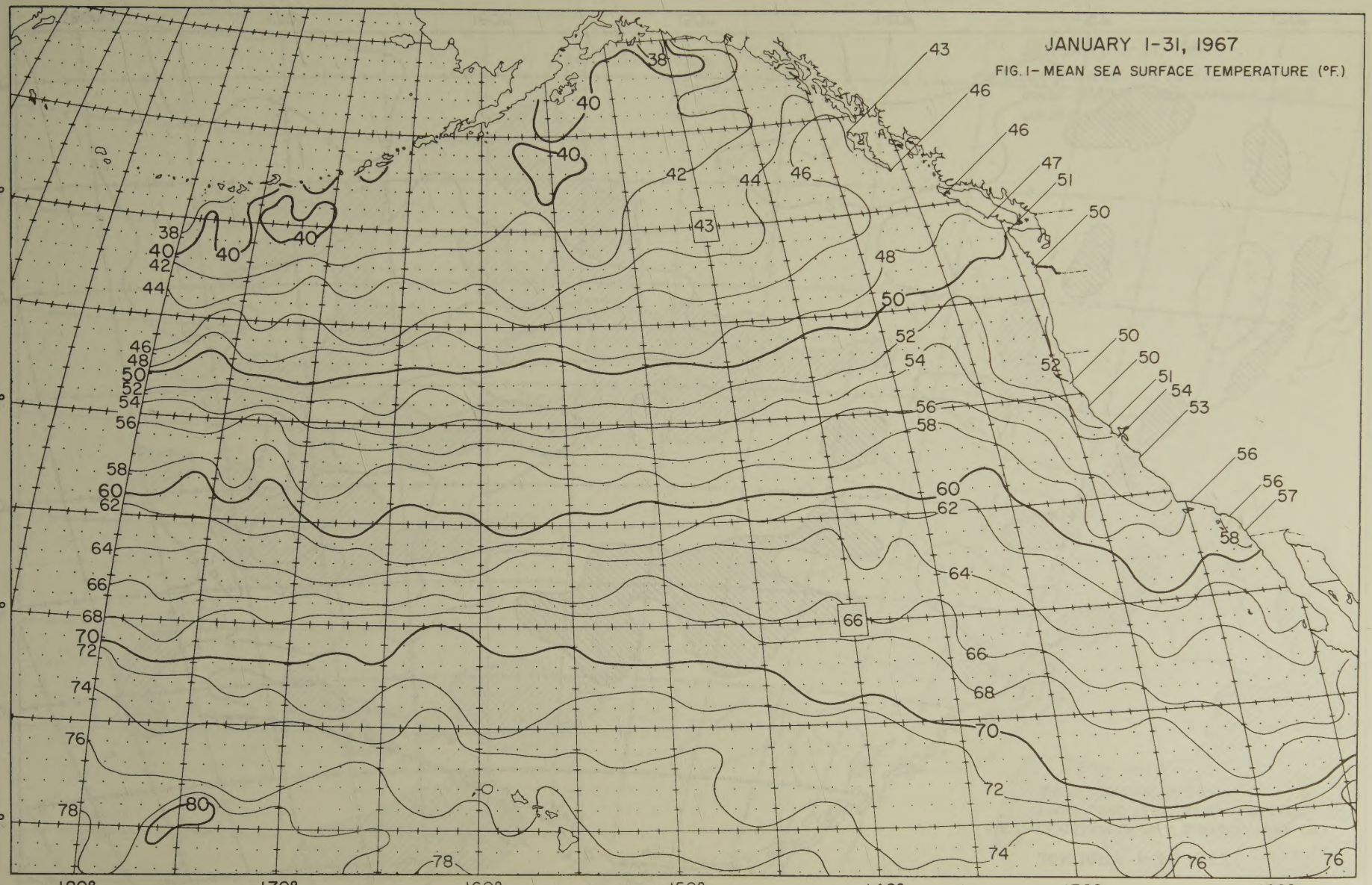
Figure 3.--Deviation of sea surface temperatures (°F) from those of January 1966. Hatched areas are colder in 1967.

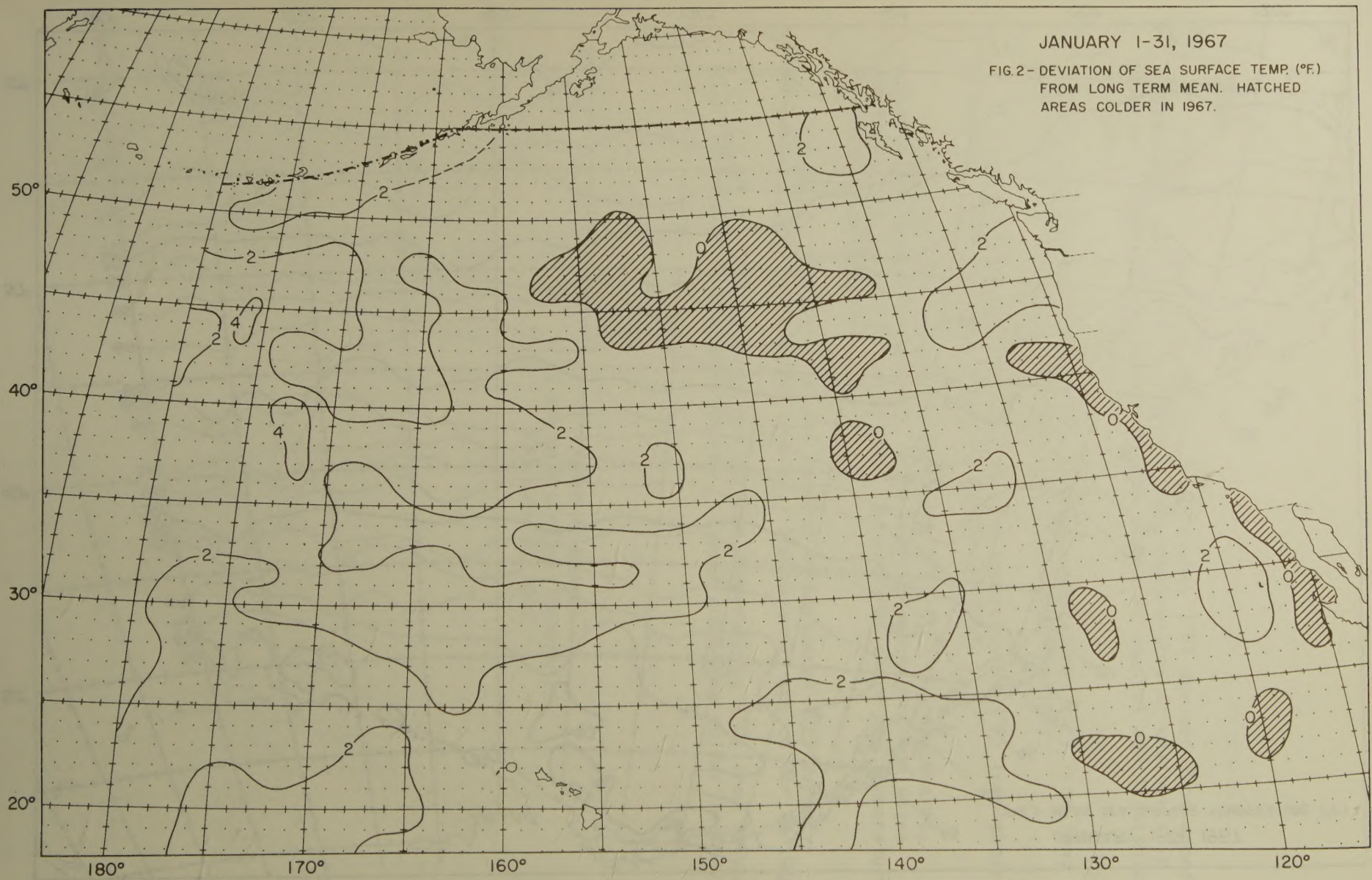
Figure 4.--Sea surface temperatures (°F) by 1-degree squares, approximately 3000 observations. Line under temperatures indicates average of two or more observations. Numerals on shore are temperatures at coastal stations.

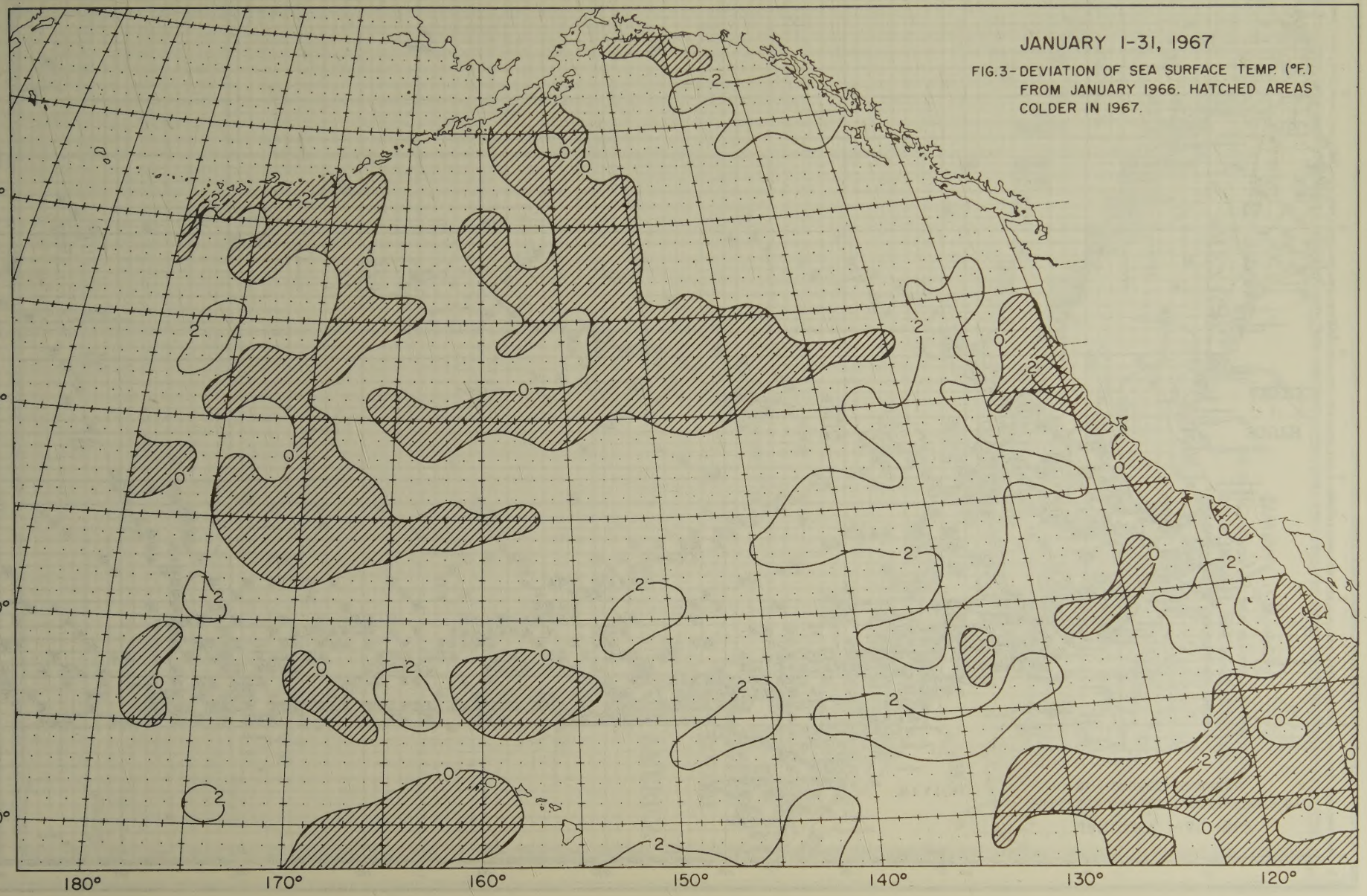
Figure 5.--Deviation of sea surface temperatures (°F) January 1967-January 1966 by 1-degree squares. Shaded areas are colder in 1967.

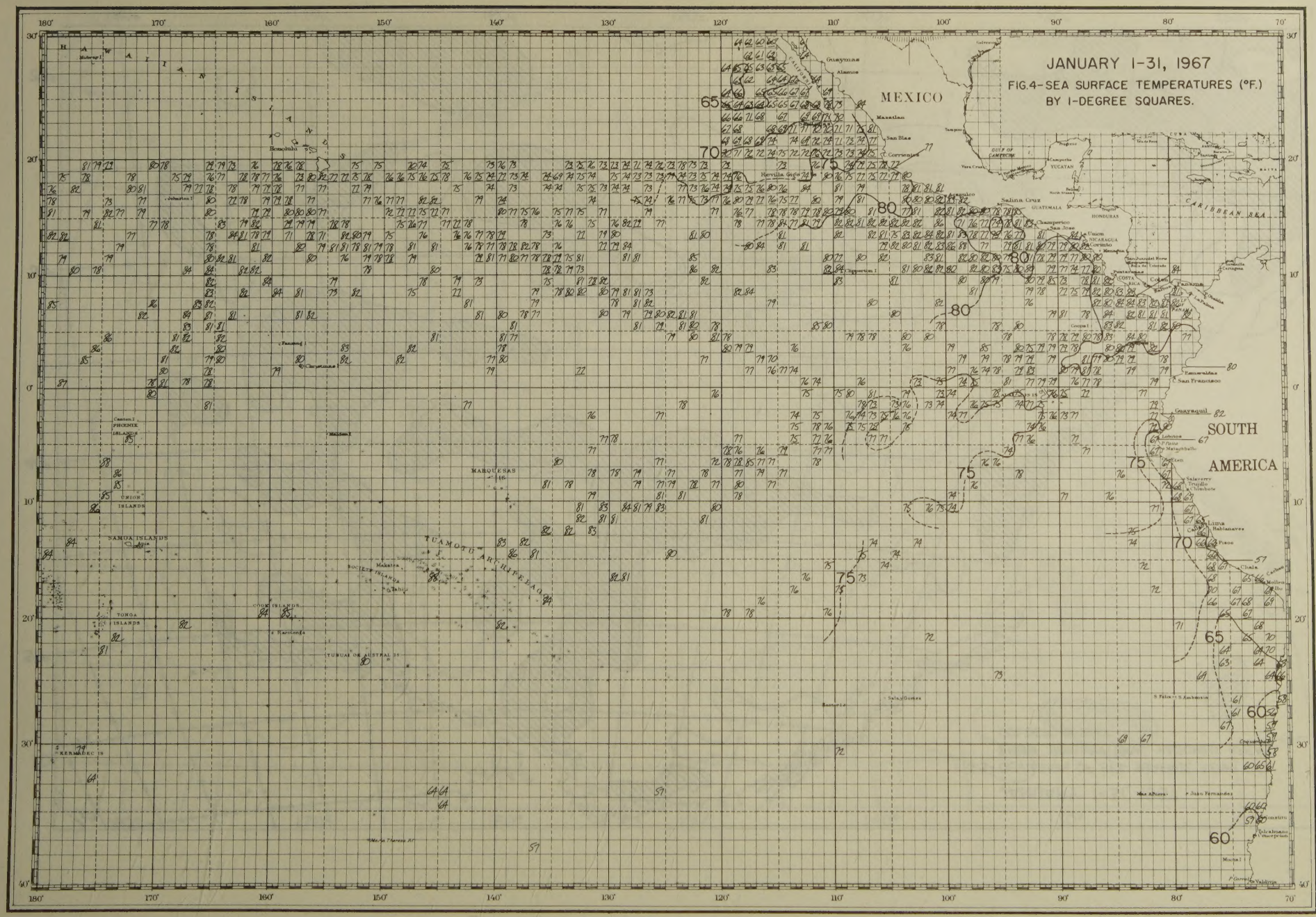
Figure 6.--Deviation of sea surface temperatures (°F) from 12-year mean (1947-1958) by 2-degree squares. Shaded areas are colder in 1967.

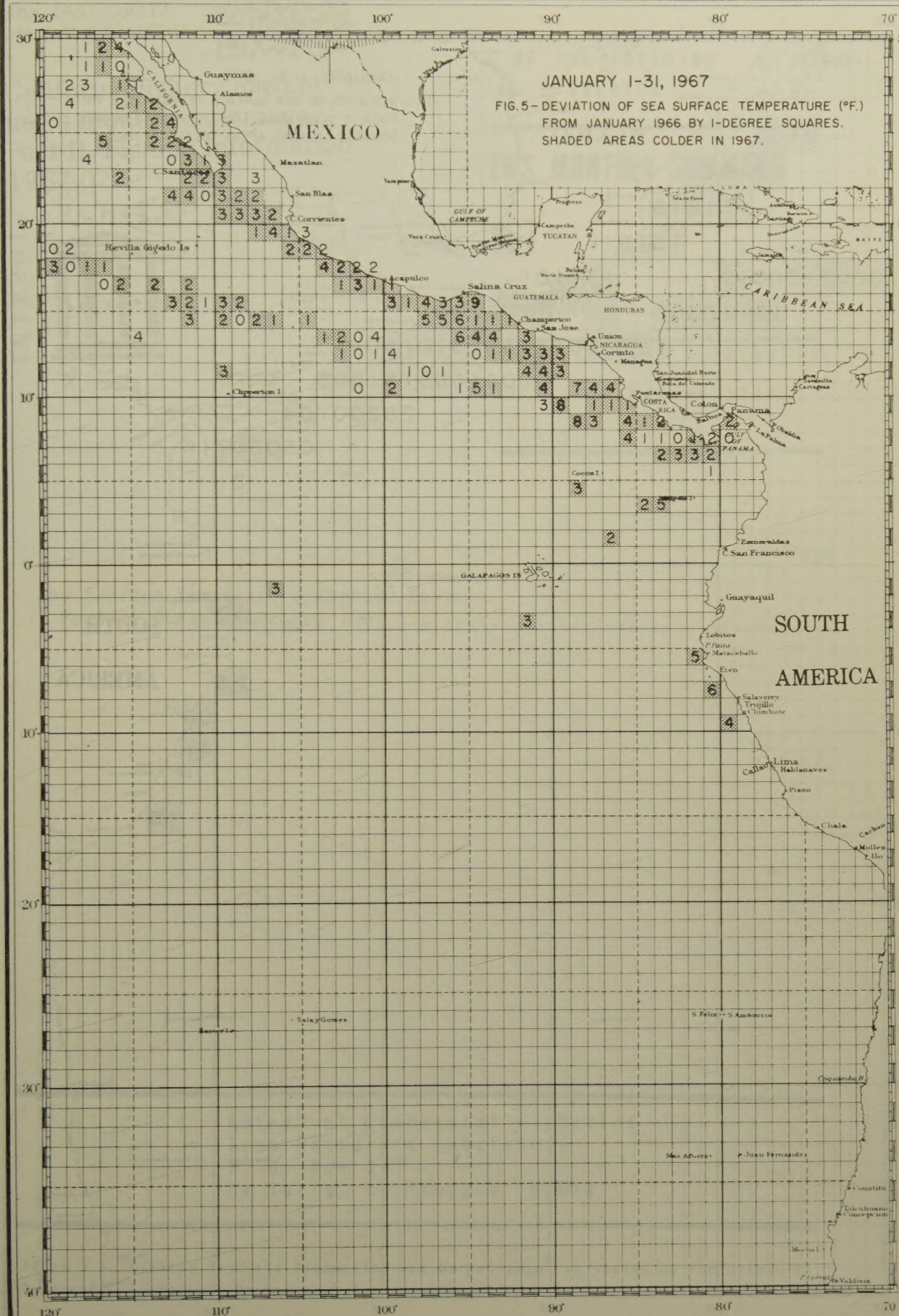
James A. Renner
Fishery Biologist (General)
February 6, 1967

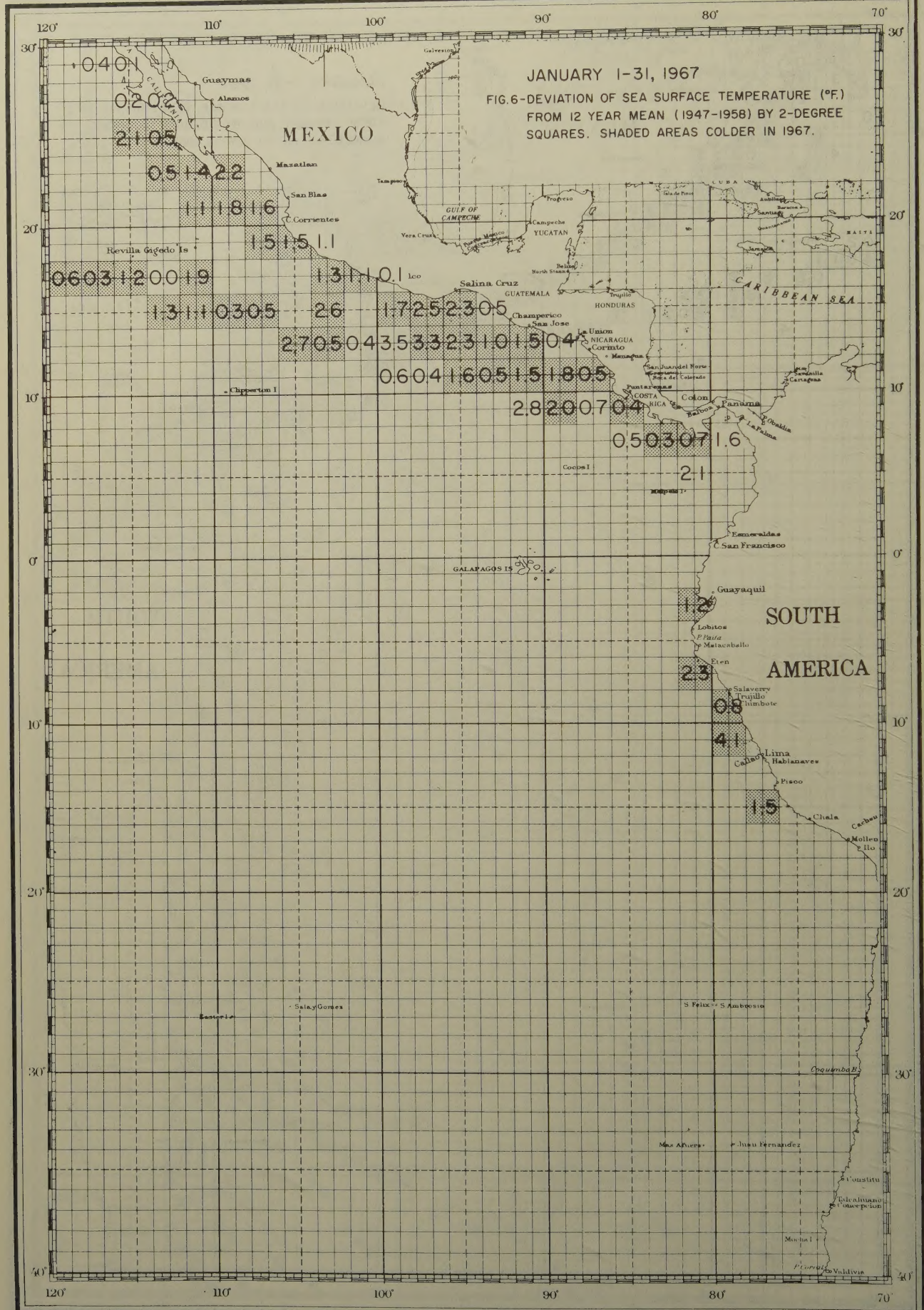

JANUARY 1-31, 1967
FIG. 1- MEAN SEA SURFACE TEMPERATURE (°F.)
50°
40°
30°
20°
180°
170°
160°
150°
140°
130°
120°


JANUARY 1-31, 1967
FIG. 2 - DEVIATION OF SEA SURFACE TEMP. (°F.) FROM LONG TERM MEAN. HATCHED AREAS COLDER IN 1967.
50°
40°
30°
20°
180°
170°
160°
150°
140°
130°
120°


JANUARY 1-31, 1967
FIG.3-DEVIATION OF SEA SURFACE TEMP. (°F.) FROM JANUARY 1966. HATCHED AREAS COLDER IN 1967.
50°
40°
30°
20°
180°
170°
160°
150°
140°
130°
120°
0
2


JANUARY 1-31, 1967
FIG.4-SEA SURFACE TEMPERATURES (°F.)
BY 1-DEGREE SQUARES.
MEXICO
SOUTH
AMERICA
CARIBBEAN SEA
HAWAIIAN ISLANDS
PHOENIX ISLANDS
UNION ISLANDS
SAMOA ISLANDS
TOKELAU ISLANDS
COOK ISLANDS
TUAMOTU ARCHIPELAGO
MARQUESAS
SOCIETY ISLANDS
TUBUAI OR AUSTRAL IS
KERMADEC IS
Honolulu
Johnston I
Palmyra I
Christmas
Canton I
Enderbury I
Malden I
Nukuoro
Makatea
Tahiti
Rarotonga
Manihiki
Penrhyn
Suwarrow
Nassau I
Aitutaki
Manuae
Mitiaro
Atiu
Rimatara
Rurutu
Raivavae
Tubuai
Rapa
Marcus I
Marcus Reefs
Wake I
Midway I
Guaymas
Alamos
Mazatlan
San Blas
Corronado
Revilla Gigedo
Acapulco
Salina Cruz
GUATEMALA
HONDURAS
Champerico
San Jose
NICARAGUA
Corinto
Managua
Chiquirin I
COSTA RICA
Panama
Cocos I
Galapagos
Esmeraldas
San Francisco
Guayaquil
Salaverry
Trujillo
Chimbote
Lima
Callao
Pisco
Chala
Mollendo
Ilo
Arica
Iquique
Mejillones
Antofagasta
Chanaral
Coquimbo
Valparaiso
Juan Fernandez
Mas Afuera
S. Felix
S. Ambrosio
Salas y Gomez
Easter I
Gulf of California
Gulf of Mexico
Yucatan
Campeche
Tampico
Vera Cruz
Belize
Cuba
Haiti
Jamaica
Panama Canal
Galveston


JANUARY 1-31, 1967
FIG. 5 - DEVIATION OF SEA SURFACE TEMPERATURE (°F.) FROM JANUARY 1966 BY 1-DEGREE SQUARES. SHADED AREAS COLDER IN 1967.
MEXICO
SOUTH AMERICA
CARIBBEAN SEA
GULF OF CAMPECHE
GULF OF PANAMA
GALAPAGOS IS
CALIFORNIA
Guaymas
Alamos
Mazatlan
San Blas
Corrientes
Revilla Gigedo Is
Acapulco
Salina Cruz
GUATEMALA
HONDURAS
Champerico
San Jose
La Union
NICARAGUA
Corinto
Managua
Puntarenas
COSTA RICA
Colon
Panama
Coco I
Esmeraldas
San Francisco
Guayaquil
Lobitos
Malacaballo
Eten
Salaverry
Trujillo
Chimbote
Lima
Callao
Pisco
Chala
Mollendo
Arica
Iquique
Juan Fernandez
Valdivia


JANUARY 1-31, 1967
FIG.6-DEVIATION OF SEA SURFACE TEMPERATURE (°F.) FROM 12 YEAR MEAN (1947-1958) BY 2-DEGREE SQUARES. SHADED AREAS COLDER IN 1967.
MEXICO
SOUTH AMERICA
CARIBBEAN SEA
GULF OF CAMPECHE
GALAPAGOS IS
Guaymas
Alamos
Mazatlan
San Blas
Corrientes
Revilla Gigedo Is
Salina Cruz
GUATEMALA
HONDURAS
Champerico
San Jose
La Union
NICARAGUA
Cormto
Managua
Chipperton I
COSTA RICA
Colon
Panama
Cocos I
Esmeraldas
San Francisco
Guayaquil
Lobitos
Paita
Malacaballo
Eten
Salaverry
Trujillo
Chimbote
Lima
Callao
Hablanaves
Pisco
Chala
Cachau
Molleo
Ilo
Sala y Gomez
Easter I
S Felix
S Ambrosio
Coquimbo
Mas Afuera
Juan Fernandez
Constitu
Talcahuano
Concepcion
Mocha I
Corral
Valdivia
0 4 0 1
0 2 0
2 1 0 5
0 5 1 4 2 2
1 1 1 8 1 6
1 5 1 5 1 1
0 6 0 3 1 2 0 0 1 9
1 3 1 1 0.1
1 3 1 1 0 3 0 5
2 6
1 7 2 5 2 3 0 5
2 7 0 5 0 4 3 5 3 3 2 3 1 0 1 5 0 4
0 6 0 4 1 6 0 5 1 5 1 8 0 5
2 8 2 0 0 7 0 4
0 5 0 3 0 7 1 6
2 1
1 2
2 3
0 8
4 1
1 5
120°
110°
100°
90°
80°
70°
30°
20°
10°
0°
40°